

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A charging device comprising:

a charge roller formed with annular grooves at opposite end portions thereof and configured to charge an image carrier; and

annular gap forming members each being fitted in a particular one of said annular grooves for forming a gap between said charge roller and the image carrier;

wherein said gap forming members each have an area of $1.0 \times 10^{-6} \text{ m}^2$ to $3.0 \times 10^{-6} \text{ m}^2$ in a section containing an axis of said charge roller.

Claim 2 (Original): The charging device as claimed in claim 1, wherein said gap forming members are formed of a thermally shrinkable material.

Claim 3 (Original): The charging device as claimed in claim 1, wherein a ratio of a width of each of said gap forming members in an axial direction of said charge roller to a thickness is between 25 and 100.

Claim 4 (Original): The charging device as claimed in claim 1, wherein said charge roller comprises a resin layer.

Claim 5 (Original): The charging device as claimed in claim 4, wherein said resin layer contains an ion-conductive substance.

Claim 6 (Original): The charging device as claimed in claim 4, wherein a ratio of a thickness of said resin layer to a thickness of an individual gap forming member is between 5 and 20.

Claim 7 (Original): The charging device as claimed in claim 1, wherein said gap forming members are formed of a fluorine-based resin.

Claim 8 (Original): The charging device as claimed in claim 7, wherein the fluorine-based resin is insulative.

Claim 9 (Original): The charging device as claimed in claim 1, further comprising voltage applying means for applying to the image carrier via said charge roller a voltage made up of a DC voltage and an AC voltage superposed on said DC voltage and having a peak-to-peak voltage that is two times or more higher than a discharge start voltage between said charge roller and said image carrier.

Claim 10 (Original): An image forming apparatus comprising:

an image carrier; and

a charging device configured to charge said image carrier;

said charging device comprising:

a charge roller formed with annular grooves at opposite end portions thereof and configured to charge said image carrier; and

annular gap forming members each being fitted in a particular one of said annular grooves for forming a gap between said charge roller and said image carrier;

wherein said gap forming members each have an area of $1.0 \times 10^{-6} \text{ m}^2$ to $3.0 \times 10^{-6} \text{ m}^2$ in a section containing an axis of said charge roller.

Claim 11 (Original): The apparatus as claimed in claim 10, wherein the gap is $100 \mu\text{m}$ or less between a portion of said charge roller delimited by said annular grooves and corresponding to an image forming range of said image carrier and said image carrier.

Claim 12 (Currently Amended): The apparatus as claimed in claim 10, further comprising a cleaning member having a length great enough to contact at least two ~~both~~ of said gap forming members in the axial direction and configured to clean said charge roller and said gap forming members.

Claim 13 (Currently Amended): The apparatus as claimed in claim 10, wherein at least said charging device and said image carrier are constructed into a single unit removably ~~removaly~~ mounted to a body of said apparatus.

Claims 14-49 (Canceled).